#### CONSTRUCTION OF ADCRE VECTORS

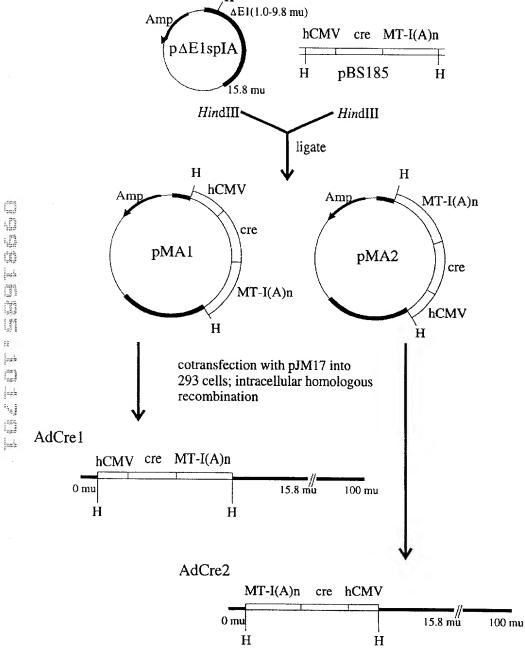
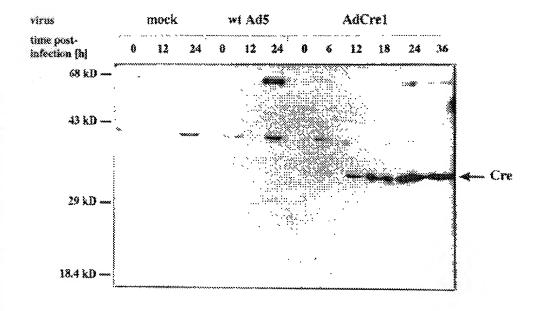


FIGURE 1

# EXPRESSION OF CRE RECOMBINASE IN CELLS INFECTED WITH ADCRE



#### CONSTRUCTION OF AD VECTORS EXPRESSING LUCIFERASE UNDER CONTROL OF A MOLECULAR SWITCH

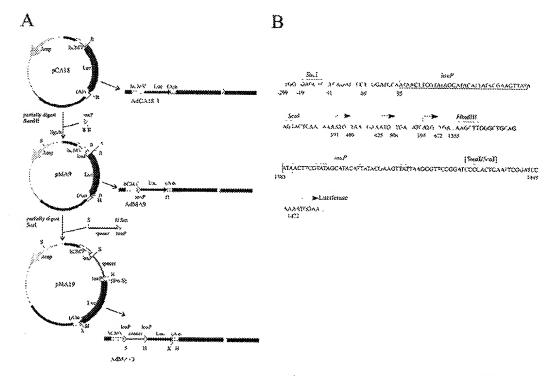
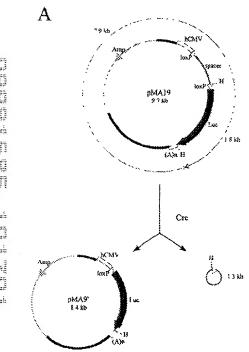


FIGURE 3

#### CRE MEDIATED RECOMBINATION



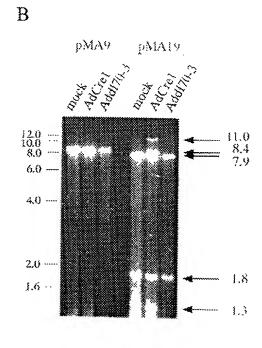
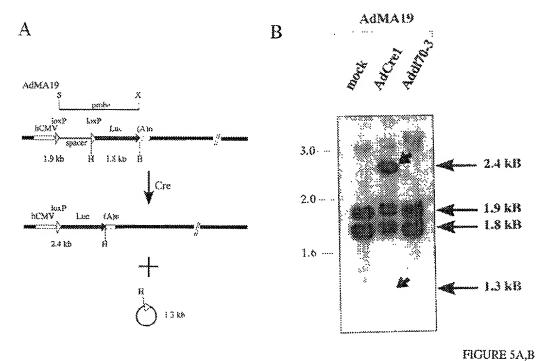


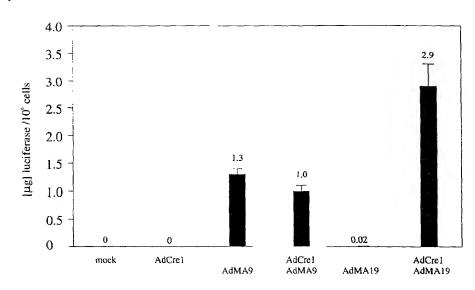
Figure 4

#### EXCISION OF SEQUENCES FROM ADMA19 IN CELLS COINFECTED WITH ADMA19 AND ADCRE



#### EXPRESSION OF LUCIFERASE IN AD VECTOR INFECTED CELLS

Expt. 1



Expt. 2

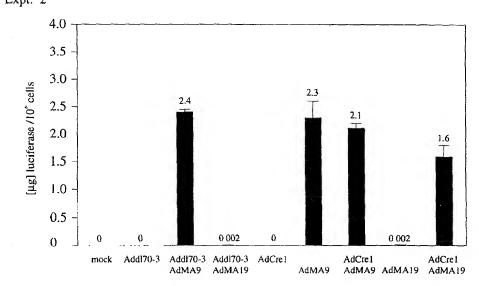
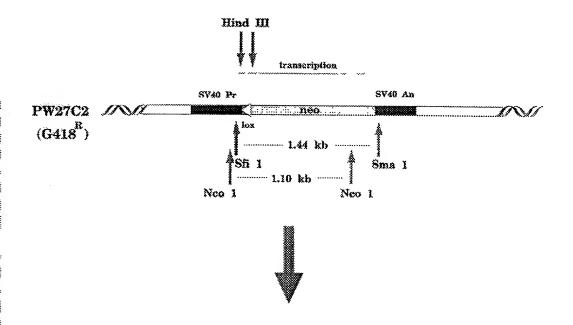


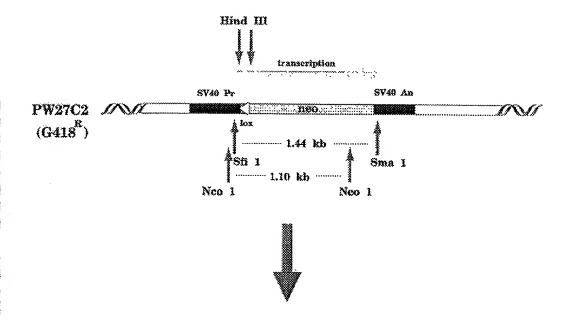
FIGURE 5C

### STRUCTURE OF INTEGRATED SEQUENCES IN CELL LINE PW27C2



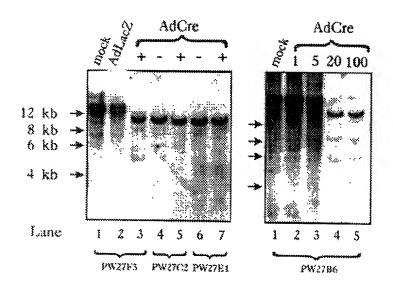
EXPRESSION OF NEO RESULTING IN G418 RESISTANCE

#### STRUCTURE OF INTEGRATED SEQUENCES IN CELL LINE PW27C2

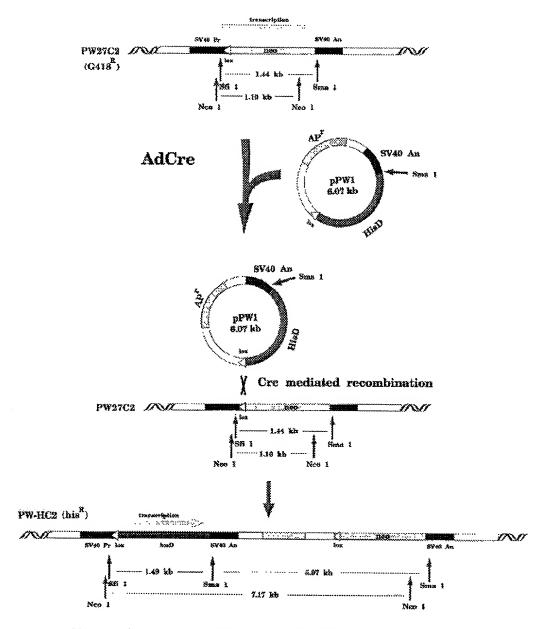


EXPRESSION OF NEO RESULTING IN G418 RESISTANCE

#### SOUTHERN BLOT HYBRIDIZATION ANALYSIS OF DNA FROM CELL LINES INFECTED WITH ADCRE

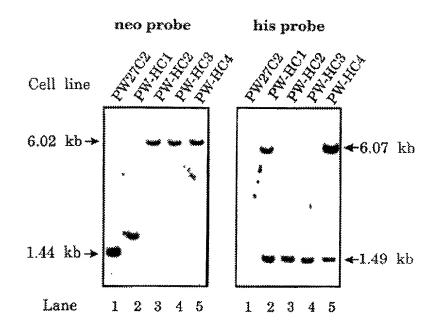


#### CRE-MEDIATED INSERTION OF A PLASMID ENCODING HISD SEQUENCES INTO THE LOX SITE OF CELL LINE PW27C2

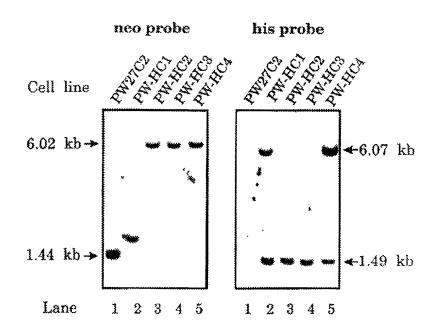


Expression of hisD resulting in Histidinol resistance

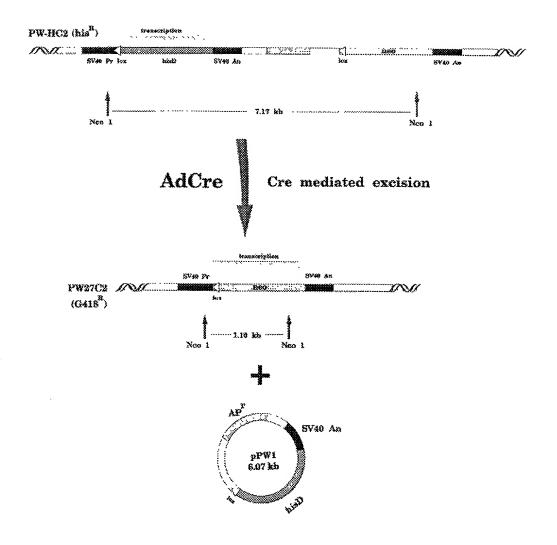
## SOUTHERN BLOT HYBRIDIZATION ANALYSIS OF CELL LINES DERIVED BY CRE MEDIATED INTEGRATION OF pPW1



#### SOUTHERN BLOT HYBRIDIZATION ANALYSIS OF CELL LINES DERIVED BY CRE MEDIATED INTEGRATION OF pPW1



#### CRE-MEDIATED EXCISION OF DNA CONTAINING hisD SEQUENCES FLANKED BY LOX SITES



Loss of hisD expression (Histidinol sensitive) Gain of neo expression (G418 resistant)

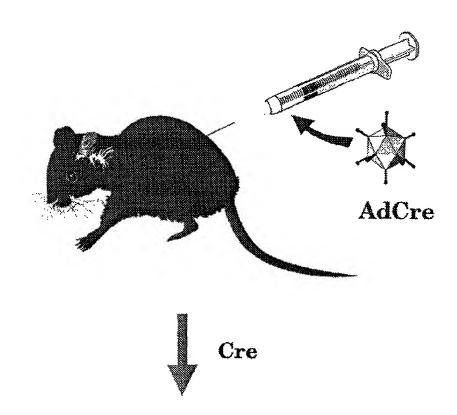
FIGURE 8A

Multiplicity of infection (PFU/cell)

## IN VIVO GENE EXPRESSION CONTROLLED BY A MOLECULAR SWITCH



#### TRANSGENICS CONTAINING GENES CONTROLLED BY A MOLECULAR SWITCH



EXPRESSION OF  $\beta$ -Gal, Rb, P53, Neu ETC.